

CLAIMS

1 A streaming system comprising a server which transmits a media stream having a layer structure including at least a session layer through a network and a client which receives the media stream from the server through the network,

the server comprising:

a storing unit operable to store management information for managing the media stream in a session description protocol of the session layer of the media stream; and

a transmitting unit operable to transmit the session description protocol in which the management information is stored to the client in the session layer of the media stream, and

the client comprising,

a receiving unit operable to receive the session description protocol in which the management information is stored from the server;

an extracting unit operable to extract the management information from the received session description protocol; and

a managing unit operable to manage the media stream on the basis of the extracted management information.

2. The streaming system according to claim 1, wherein

the management information is an IPMP tool list or an IPMP descriptor related to an IPMP tool used in the protection of the media stream, and

the managing unit specifies the IPMP tool by the extracted IPMP tool list or the IPMP descriptor to manage the media stream.

3. The streaming system according to claim 1, wherein the management information is right information of the media stream.
4. The streaming system according to any one of claims 1 to 3, wherein the management information is stored in a session level attribute related to all media streams in the same session of the session description protocol.
5. The streaming system according to any one of claims 1 to 3, wherein the management information is stored in a media level attribute related to associated media streams in the session description protocol.
6. A server which transmits a media stream having a layer structure including at least a session layer to a client through a network, comprising:
 - a storing unit operable to store management information for managing the media stream in a session description protocol of the session layer of the media stream; and
 - a transmitting unit operable to transmit the session description protocol in which the management information is stored to the client in the session layer of the media stream.
7. The server according to claim 6, wherein the management information is an IPMP tool list or an IPMP descriptor related to an IPMP tool used in protection of the media stream.

8. The server according to claim 6, wherein
the management information is right information of the media stream
9. The server according to any one of claims 6 to 8, wherein
the management information is stored in a session level attribute related
to all media streams in the same session of the session description protocol.
10. The server according to any one of claims 6 to 8, wherein
the management information is stored in a media level attribute related to
associated media streams in the session description protocol.
11. A client which receives a media stream having a layer structure including
at least a session layer from a server through a network, comprising:
a receiving unit operable to receive a session description protocol in
which management information for managing the media stream is stored from
the server;
an extracting unit operable to extract the management information from
the received session description protocol, and
a managing unit operable to manage the media stream on the basis of
the extracted management information.
12. The client according to claim 11, wherein
the management information is an IPMP tool list or an IPMP descriptor
related to an IPMP tool used in protection of the media stream, and
the managing unit specifies an IPMP tool used in protection of the media

stream by the extracted IPMP tool list or the IPMP descriptor to manage the media stream.

- 13: The client according to claim 11, wherein
the management information is right information of the media stream.
14. The client according to any one of claims 11 to 13, wherein
the management information is stored in a session level attribute related
to all media streams in the same session of the session description protocol.
- 15 The client according to any one of claims 11 to 13, wherein
the management information is stored in a media level attribute related to
associated media streams in the session description protocol.
16. A transmitting method which transmits a media stream having a layer
structure including at least session layer to a client through a network,
comprising:
storing management information for managing the media stream in a
session description protocol of the session layer of the media stream; and
transmitting the session description protocol in which the management
information is stored to the client in the session layer of the media stream.
17. The transmitting method according to claim 16, wherein
the management information is an IPMP tool list or an IPMP descriptor
related to an IPMP tool used in protection of the media stream.

18. The transmitting method according to claim 16, wherein
the management information is right information of the media stream.
19. The transmitting method according to any one of claims 16 to 18,
wherein
the management information is stored in a session level attribute related
to all media streams in the same session of the session description protocol.
20. The transmitting method according to any one of claims 16 to 18,
wherein
the management information is stored in a media level attribute related to
associated media streams in the session description protocol
21. A transmitting program which is designed such that the transmitting
method according to any one of claims 16 to 20 can be executed by a
computer.
22. A computer readable recording medium in which the transmitting
program according to claim 21 is stored
23. A receiving method which receives a media stream having a layer
structure including at least session layer from a server through a network,
comprising:
receiving a session description protocol in which management

information for managing the media stream is stored from the server;
extracting the management information from the received session description protocol; and
managing the media stream on the basis of the extracted management information.

24. The receiving method according to claim 23, wherein
the management information is an IPMP tool list or an IPMP descriptor related to an IPMP tool of the media stream, and
in the course of the step of managing the media stream of the client, specifying an IPMP tool used in the protection of the media stream by the extracted IPMP tool list or the IPMP descriptor to manage the media stream
25. The receiving method according to claim 23, wherein
the management information is right information of the media stream.
26. The receiving method according to any one of claims 23 to 25, wherein
the management information is stored in a session level attribute related to all media streams in the same session of the session description protocol.
27. The receiving method according to any one of claims 23 to 25, wherein
the management information is stored in a media level attribute related to associated media streams in the session description protocol.
28. The receiving program which is designed such that the receiving method

according to any one of claims 23 to 27 can be executed by a computer.

29 A computer readable recording medium in which the receiving program according to claim 28 is stored.

30 A media stream transmitted and received from a server to a client through a network and having a layer structure including at least a session layer, wherein

management information for managing the media stream is stored in a session description protocol of the session layer.